2020 Census Program Management Review



March 8, 2013

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Welcome and Introductions

Today's PMR is intended to provide snapshots of several key initiatives within the 2020 Census Program:

- Several of the Program Management (PM) process areas
- Lifecycle budget and planning
- R&T testing approach, including collaboration with the Center for Adaptive Design and recent revisions to the 2014 Census Site Test (Test 20); and
- Preliminary thoughts about how to consolidate field operations for the 2020 Census.

The balance of the Program will be covered by handouts in the interest of time.





Welcome and Introductions (Cont.)

- Handouts
- I. Agenda
- II. Slides briefed today
- III. PM, SE&I and OPS/R&T status slides for offline review
- Housekeeping items
 - Restrooms
 - Quick exit strategies
 - Lunch and afternoon break
 - approximate
 - may be shortened if our discussions take longer than planned





Welcome and Introductions (Cont.)

Questions?

Q&A encouraged, but a lot of information to convey today Due to time limitations, some questions may need to be addressed offline; responses will be sent to all participants.

Email us: 20rpo.program.management@census.gov Send in questions by March 15, 2013. Include WBS number and enough context so we can followup.

Responses will be emailed by target date of March 29, 2013.







Executive Summary: Program Management Review (PMR)

- Program Overview since December 2012 PMR
 - 2020 Census Stimulus for Change
 - Risk: Budget
 - Recent Accomplishments
 - Program and Team Updates
 - 2014 Census Site Test Update (Test 20)
 - Mobile Device/BYOD
 - Look Ahead for Next PMR
 - National Census Contact Test (NCCT)
 - Administrative Records







2020 Census – Stimulus for Change

- The rising cost of the decennial census in recent decades cannot be sustained.
- The Congress has made it clear, and the Census Bureau agrees, this is untenable.
- Embarked on a research and testing program focused on major innovations to the design of the census.
- Also are committed to developing and using more corporate solutions.







Decennial Census Cost Drivers

- Diversity of the population
- Demand for improved count accuracy
- Declining response rates
- Management of major acquisitions, schedule, and budget
- Need for nationwide updating of address list prior to Census







Decennial Census Research Relative to Cost-Drivers

- Administrative Records
- Streamlining and Automating Field Management and Operations
- Optimizing Self Response
- Targeted Address Canvassing
- Non-ID Processing





Decennial Census Research Relative to Cost-Drivers

- Non-ID Processing During decennial census enumeration, the majority of people are enumerated via questionnaires delivered to their living quarters by mail or hand-delivered by U.S. Census Bureau field staff. These questionnaires contain a census identification number (Census ID) that links the questionnaire to the address of the living quarters. However, there are other opportunities for individuals to respond to the census outside of these two typical delivery modes, including coverage improvement programs and enumeration interviews conducted by Census Bureau field staff. The goal of our research is to identify, test, and refine options that readily link (match) addresses supplied by census respondents and enumerators to an existing record in our Master Address File, or in the case of a non-match, determine the correct physical location and associated geographic codes. Recent research activities include:
 - Delivered a Non-ID dataset from the 2013 National Census Contact Test to our Center for Administrative Records Research and Applications (CARRA) staff for address supplementation processing, which is the first step of a series of proposed enhancements to the Non-ID processing workflow. This process is intended to provide missing respondent address data, such as omitted apartment numbers, ZIP codes, or other address data items required to accurately match respondent address data to the Master Address File.
 - Delivered a small 2010 Non-ID dataset to Geography Division staff to initiate the first stage of research regarding address verification via administrative records. Using a GEO-developed tool which compares address data to the MAF/TIGER database (MTdb), a set of approximately 450 address records from the 2010 Non-ID responses will be compared to records in the current MTdb as well as local address and structure coordinate data recently acquired from Delaware County, Ohio. The work will also inform the work of the 2020 LUCA team and the Geographic Support Systems research staff.
 - Submitted initial requirements to Geography Division for an interactive geocoding interface that a respondent can use to identify their census block location while completing an internet questionnaire.





FY 2013 Budget Update

<u>Budget – Program Risk</u>

- President's Request for 2020 Research and Testing
- The current Continuing Resolution (through March 27, 2013)
- Effects on testing in FY 2013 and 2014
- Sequestration

Other program risks will be addressed a little later today when we delve into the Risk and Issue Management Process Area (1.111).







Program Management, WBS 1.0

- 2020 Census Program Integration Workshop
- CPEX and Knowledge Management database more to detail to be provided later this morning
- Defense Venture Catalyst Initiative (DeVenCI) "Solutions Workshop " more to come later on today
- New inter-divisional team established to discuss 2020 testing strategies
- Status of proposed new organizational structures for 2020 and Decennial Directorates







Operations, WBS 3.0 - 8.0

Automated Field Activities Team:

- Master Test Plan
- Enumeration and the Listing and Mapping Application LiMA
- Imagery in maps
- Participated in efforts related to development of software and testing scripts for various sprints





Operations, WBS 3.0 – 8.0, Cont'd.

Reducing and Improving Person Follow-up Team:

- Business case for using imagery in map display
- Exploring DAPPS data on Non-response Follow-Up (NRFU) enumerators
- Field Division and Center for Economic Studies (CES) research on pay rate methodologies

Improving Quality Control Team:

2013 Quality Control Tests and LiMA

Field Staff Training Team:

 Began exploring technologies available for training in the Center for Applied Technology (CAT)





Operations, WBS 3.0 – 8.0, Cont'd.

Decennial Architecture Team:
Working with Field Test teams

Workload Management Team:

- IVR data collection
- Delivered Mobile Integration and Testing (I&T) environment to TMO
- Requirements sessions for 2013 Census Test mobile enumeration devices

MAF Error Model/Independent MAF Quality Assessment Team:

- Use of Listing and Mapping Application (LiMA) for data collection.
- Analyzing data relative to MAF error hypotheses
- Coordination of research on Targeted Address Canvassing







Operations, WBS 3.0 – 8.0, Cont'd.

Administrative Records Modeling and Administrative Records Fitness-For-Use Teams:

Early research nearing completion – briefings in April

These projects will be spotlighted in next PMR

Optimizing Self Response Team:

- Cancelled Tests 17 and 18 as previously conceptualized
- Refining testing strategy

Contact Frame Team:

- 2013 National Census Contact Test: more about this project also in our "Look Ahead to the Next PMR"

Privacy and Confidentiality Team:

New opinion questions on Gallup Poll

Other accomplishments for OPS, WBS 3.0 -8.0 addressed in Handout





Look Ahead to the Next PMR: Purpose of 2013 NCCT

2013 National Census Contact Test (NCCT) has two primary stakeholders:

- 1. Contact Frame team
 - Use data from this test to evaluate the quality of email and phone contact information from different vendors, demographics, and geography
- 2. Non-ID Processing team
 - Seeking ways to enhance the process for matching, geocoding, and or verifying potentially new addresses obtained during census response.
 - Testing proposed enhancements to automated processing of census responses lacking a pre-assigned census identification number.





Look Ahead to the Next PMR: NCCT - Major focus 1

How likely is it that ...

- a phone number is correctly associated with an address?
- an email address is correctly associated with an address?
- we have one or more valid phone numbers for a household?
- we have one or more valid email addresses for a household?





Look Ahead to the Next PMR: NCCT - Major focus 2

How likely is it that ...

- a respondent provided address that could not be associated with an MAFID using 2010 Census procedures can be matched to the MAF with enhanced matching and geocoding processes?
- an address that could not be associated with an MAFID can be after it is supplemented with information from the commercial vendor file?





Look Ahead to Next PMR: Administrative Records Research

High Level Milestones

April 2013- Release draft high-level findings (Position Papers) on the quality and coverage metrics of, and measures of inconsistencies among, administrative record source combinations;

and, for candidate options, modeling results on ways to reduce NRFU field contacts.

May 2013- Led by the Policy and Communications team, commence engagement with internal and external stakeholders on interim results to elicit guidance.

June 2013- Release final high-level findings on the quality and coverage metrics of, and measures of inconsistencies among, administrative record source combinations;

and for candidate options, on modeling results on ways to reduce NRFU field contacts.

December 2013- Release final recommendations for use of administrative records for enumeration and requirements for the 2014 Census Test.





Look Ahead to the Next PMR: Administrative Records Fitness For Use

Position Paper Scope

The quality and coverage metrics of, and measures of inconsistencies among, administrative record source combinations:

- Option 1, UAAs only
- Option 2, IRS and UAAs only
- Option 3, maximum administrative records composite, involving 19 datasets

The quality implications involved with each option.

A strategy on addressing and using records that don't have a Protected Identification Key, used for matching.





Look Ahead to the Next PMR: Administrative Records Modeling

Position Paper Scope

Modeling results on strategies to reduce NRFU field contacts. Results to address:

- Administrative record and non-administrative record sources for curtailed NRFU units for both model-based and rule-based algorithms.
- Count and characteristic imputation methods to account for remaining census missing data.
- Metrics to assess the accuracy of curtailed NRFU contact strategies and administrative record sources.
- Optimum number of contacts required of each unit.
- Geographic areas or housing units to receive very few or no field visits.

The advantages (cost savings) and challenges (coverage degradation) with each curtailed NRFU contact strategy.







Program Management Review Wrap-Up

- Mark your calendars: the next PMR will be June 21, 2013.
- We welcome feedback on today's PMR.
 - 1. Suggestions or feedback you would like us to consider
 - 2. Requests for future agenda topics or special presentations
 - 3. Questions by March 15, 2013 & responses targeted for March 29, 2013

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